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| APPLICATION NO. | FILING DATE                    | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |  |
|-----------------|--------------------------------|----------------------|---------------------|------------------|--|
| 09/833,898      | 04/12/2001                     | Kevin L. Payton      | 10283.3801          | 2060             |  |
| 22235 7         | 590 02/05/2003                 |                      |                     |                  |  |
|                 | EY AND DIMAGGI                 | EXAMINER             |                     |                  |  |
|                 | EWS AVENUE<br>ERDALE, FL 33316 | WILSON, JOHN J       |                     |                  |  |
|                 |                                |                      | ART UNIT            | PAPER NUMBER     |  |

DATE MAILED: 02/05/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

|   |  |                                |   |                   | A                                      |  |  |  |  |  |
|---|--|--------------------------------|---|-------------------|--|--|--|--|--|--|
|   |  | Application N .                | A   | pplicant(s)       | —————————————————————————————————————— |  |  |  |  |  |
| •   | •  | 09/833,898                     | P   | AYTON, KEVIN      | L.                                     |  |  |  |  |  |
|   | Office Action Summary  | Examin r                       | A   | rt Unit           |  |  |  |  |  |  |
|   |  | John J. Wilson                 | 37  | 732               |  |  |  |  |  |  |
|   | The MAILING DATE of this communication a   | ppears on the cover si         | heet with the corr                            | espondence ad     | dress                                  |  |  |  |  |  |
| Period for Reply  |  |                                |   |                   |  |  |  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).  - Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).  Status |  |                                |   |                   |  |  |  |  |  |  |
| 1)🖂   | Responsive to communication(s) filed on 18   | 8 <u>December 2002</u> .       |   |                   |  |  |  |  |  |  |
| •   | <u> </u>   | This action is non-fina        | ıl.   |                   |  |  |  |  |  |  |
| •   | Since this application is in condition for allo  | wance except for for           | nal matters, prose                            | ecution as to th  | e merits is                            |  |  |  |  |  |
|   | closed in accordance with the practice unden<br>n of Claims                              | er <i>Ex parte Quayle</i> , 19 | 935 C.D. 11, 453                              | O.G. 213.         |  |  |  |  |  |  |
| 4)⊠ C   | claim(s) <u>1-14</u> is/are pending in the applicati                                     | on.                            |   |                   |  |  |  |  |  |  |
| 48  | a) Of the above claim(s) is/are withd  | rawn from considerati          | on.   |                   |  |  |  |  |  |  |
| 5) 🗌 C  | claim(s) is/are allowed.   |                                |   |                   |  |  |  |  |  |  |
| 6)⊠ C   | claim(s) <u>1-14</u> is/are rejected.  |                                |   |                   |  |  |  |  |  |  |
| 7) 🗌 C  | claim(s) is/are objected to.   |                                |   |                   |  |  |  |  |  |  |
|   | laim(s) are subject to restriction and   | I/or election requireme        | ent.  |                   |  |  |  |  |  |  |
| Applicatio  | ·  |                                |   |                   |  |  |  |  |  |  |
| •   | ne specification is objected to by the Examin  |                                |   |                   |  |  |  |  |  |  |
| •   | ne drawing(s) filed on is/are: a) acc  |                                |   |                   |  |  |  |  |  |  |
|   | Applicant may not request that any objection to  | <del>-</del> · ·               | -   |                   | or                                     |  |  |  |  |  |
| ,—  | ne proposed drawing correction filed on  If approved, corrected drawings are required in |                                |   | u by the Examin   | er.                                    |  |  |  |  |  |
|   | ne oath or declaration is objected to by the l   |                                |   |                   |  |  |  |  |  |  |
| ,—  | der 35 U.S.C. §§ 119 and 120   | Examinor.                      |   |                   |  |  |  |  |  |  |
| •   | cknowledgment is made of a claim for fore  | ian priority under 35 l        | ISC & 110(a)_(                                | d) or (f)         |  |  |  |  |  |  |
| •   | All b)☐ Some * c)☐ None of:  | igh phonty under 55 c          | 7.0.0. § 113(a)-(i                            | <i>a)</i> 01 (1). |  |  |  |  |  |  |
| , —   | . Certified copies of the priority docume  | ints have been receive         | ed  |                   |  |  |  |  |  |  |
|   | . Certified copies of the priority docume  |                                |   | No                |  |  |  |  |  |  |
|   | . Copies of the certified copies of the pr   |                                | • •   |                   | Stane                                  |  |  |  |  |  |
|   | application from the International E<br>e the attached detailed Office action for a li   | Bureau (PCT Rule 17.           | .2(a)).                                       | ii tiis ivationai | Clago                                  |  |  |  |  |  |
| 14)∐ Ac   | knowledgment is made of a claim for dome   | stic priority under 35 l       | U.S.C. § 119(e) (                             | to a provisiona   | l application).                        |  |  |  |  |  |
| a) ☐ The translation of the foreign language provisional application has been received.  15)☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.  |  |                                |   |                   |  |  |  |  |  |  |
| Attachment(s  | •  | , , ,                          | <b>00</b> 1-1 <b>3</b>                        | -                 |  |  |  |  |  |  |
| 1) Notice   | of References Cited (PTO-892) of Draftsperson's Patent Drawing Review (PTO-948)          | 5) 🔲 N                         | nterview Summary (P<br>otice of Informal Pate |                   |  |  |  |  |  |  |
| 3) L Informa  | tion Disclosure Statement(s) (PTO-1449) Paper No(s)                                      | ) 6) [ Of                      | ther: .                                       | ·                 |  |  |  |  |  |  |

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#### **DETAILED ACTION**

# Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 11, 13 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeVincenzo et al (5853291). DeVincenzo (291) shows a subperiosteal system comprising a small thin body 66 having apertures for a bone fastener, column 3, line 36, a rigidly attached wire guide 72, column 7, lines 40-49, and a central member connecting the body to the wire guide as shown, Fig. 19. It would be obvious to use plural fasteners in view of the showing of a plurality of apertures. As to claim 13, see malleable, column 1, line 67.

Claims 1, 2, 7, 8 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeVincenzo et al (5853291) in view of DeVincenzo (5938437).

DeVincenzo (291) shows a subperiosteal system comprising a small thin body 66 having apertures for a bone fastener, column 3, line 36, wire guide 72, column 7, lines 40-49, and a central member connecting the body to the wire guide as shown, Fig. 19.

DeVincenzo (291) does not show a bendable central member. DeVincenzo (437) shows a bendable central member 15, column 3, line 1. It would be obvious to one of ordinary skill in the art to modify DeVincenzo (291) to include a bendable portion as

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shown by DeVincenzo (437) in order to adjust the device to fit the individual patient in order to apply the desired forces to the teeth. The claim language limiting the size of the fastener to one that anchors the body "securely" to the bone is very broad in scope and depends on the manner and the bone that the device is used with. In view of this, it is held that the anchors shown by DeVincenzo (291) will securely anchor the body and/or that the general size of the anchors are an obvious matter of choice in the degree of a known parameter to the skilled artisan. The size is further held to not be critical as evidenced by the disclosure of the present application which fails to disclose a size for the anchor which will function as claimed. As to claim 2, DeVincenzo (291) shows a guide 72 for an orthodontic wire in Fig. 19, however, does not show the wire connected to first and second orthodontic appliances. DeVincenzo (437) shows first and second orthodontic appliances 2, see Figs. 1 and 2 and an orthodontic wire 1. It would be further obvious to one of ordinary skill in the art to modify DeVincenzo (291) to include two appliances as shown by DeVincenzo (437) in order to apply the desired forces to the teeth. As to claims 7 and 8, the method steps are obvious to one of ordinary skill in the art in view of the shown structure above. The method steps of periodically adjusting the wire and of removing the appliances are well known method steps in orthodontic treatment, and therefore, are held to be obvious to one of ordinary skill in the art. As to claim 12, DeVincenzo (291) does not show a pring rigidly attached to the appliance for receiving an orthodontic tension band. DeVincenzo (437) shows a prong 3 that is for receiving an elastic thread 10, Fig. 2. It would be obvious to one of

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ordinary skill in the art to modify DeVincenzo (291) to include using the prong as shown by DeVincenzo (437) in order to apply the desired forces to the teeth.

Claims 3, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeVincenzo et al (5853291) in view of DeVincenzo (5938437) as applied to claim 1 above and further in view of Kanomi et al (5921774). The above combination does not show a bracket that is intended to be used with a tension band. It is well known in the art to attach tension bands to brackets. Kanomi shows a tension band bracket 25, 34. It would be obvious to one of ordinary skill in the art to modify the above combination to include the use of a bracket with tension bands as shown by Kanomi in order to apply the desired forces to the teeth.

Claims 4-6 are rejected under 35 U.S.C. 103(a) as being unpatentable over DeVincenzo (5853291) in view of Kanomi et al (5921774). DeVincenzo (291) shows a subperiosteal system comprising a small thin body 66 having apertures for a bone fastener, column 3, line 36, wire guide 72, column 7, lines 40-49, and a central member connecting the body to the wire guide as shown, Fig. 19. DeVincenzo does not show a bracket that is intended to be used with a tension band. It is well known in the art to attach tension bands to brackets. Kanomi shows a tension band bracket 25, 34. It would be obvious to one of ordinary skill in the art to modify the above combination to include the use of a bracket with tension bands as shown by Kanomi in order to apply the desired forces to the teeth.



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## Claim R j ctions - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 11-13 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. In claim 11, lines 15 and 16, "mounted on at least one of the patient's teeth" is improperly attempting to claim applicant's invention in combination with human anatomy.

# Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. In line 13, "adjacent and no-excusal" is unclear.

#### Response to Arguments

Applicant's arguments filed December 18, 2002 have been fully considered but they are not persuasive. Applicant argues that the prior art does not show using a true bone anchor, however, there is not specific structure nor method step claimed that differs from the structure and method of the prior art as shown above. Just as the

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present invention, the prior art is implanted between the bone and tissue and held by bone fasteners. That the prior art also uses additional structure to encourage overgrowth of bone does not negate the structure that it shows. Applicant's article claims fail to claim any patentable difference in structure, instead, they are directed to the same structure with terminology to imply a different intended use. As such, the actual structure shown is properly met, and the intended use is given no patentable weight. Applicant indicated in the remarks that it was intended to cancel claims 1-10, hoever, these claims were not actually cancelled and are made part of this action.

#### Conclusion

Any inquiry concerning this communication should be directed to John Wilson at telephone number (703) 308-2699.

> John J. Wilson Primary Examiner Art Unit 3732

Ja/ils

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February 3, 2003 Fax (703) 308-2708

Work Schedule: Monday to Friday - Flex Time